

Engineers

Engineering students need a taste of the job

LOGAN — It's positive reinforcement — in advance.

You give the student a little job satisfaction as he's learning to do the job and chances are he'll stick around long enough to learn to do it, according to Utah State University engineering professor P. Thomas Blotter, who has written a textbook incorporating this approach.

"More than words are needed to adequately introduce engineering," said Blotter. "Students need to feel the inward triumphs associated with solving problems."

These feelings have been long in coming to most engineering students, according to the professor.

"Students have, in the past, been expected to survive a barrage of courses in mathematics, physics, chemistry and the humanities before ever getting around to any engineering application," he said. "As a result, some students were disillusioned and their careers in the field suffered premature deaths."

Blotter supports the idea of rigorous scientific training, but thinks students should also experience during that training some of the rewards of the discipline.

"There is no reason that all the excitement of applying those fundamentals to the solution of problems should be held sacred until graduation," he said.

Blotter's text, "Introduction to Engineering," published by John Wiley and Sons, one of the two leading publishers of engineering texts, points the freshmen engineering hopeful in the direction of quickly learning what engineering offers.

Blotter's text not only gives the student opportunity and suggestions for rewarding problem-solving, but also presents some challenges the student may never have thought of trying to meet successfully.

Engineers must solve problems — and then convince they've done so, said the USU professor.